



DIRECTOR'S COLUMN

Henry L. Green

Updating Codes

Recently, comments were made that the Bureau of Construction Codes and the Construction Code Commission are allowing too many amendments to locally adopted codes. A review of ordinances submitted within the past 18 months, indicated three technical amendments were made to locally adopted building codes. Electrical code amendments included those developed by the Reciprocal Electrical Council for their member communities.

Amendatory language has also been included in ordinances to establish such local conditions as frost depth and ground snow loads. Additional language includes provisions cited by nationally recognized model codes (i.e. sewer depth).

The electrical code amendments adopted by the RECI are the same amendments contained in the Part 8 Electrical Code Rules. This is the second edition of the rules, where the State and the RECI have jointly reviewed the codes to determine appropriate amendatory language.

The State Construction Code Act provides that amendments to locally adopted codes must meet certain tests. These provisions include: requirements for the adequate protection of the health, safety, or welfare of the people of the governmental subdivision. Further

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1999 National Electrical Code Adoption

by Thomas Kriegish

The process for promulgation of the Part 8 rules adopting the 1999 National Electrical Code (NEC) update has been completed. The Part 8 rules include administrative regulations and technical amendments to the NEC. There are no substantive changes in these rules from the 1996 version, however, changes have been made consistent with editorial changes in the NEC. This office is presently working on publication and mailing of the new code rules to all enforcing agencies, electrical inspectors, licensed electrical contractors and licensed master electricians. The rules should be received by the end of November with an effective enforcement date in early December. The specific effective date will be provided with the rules.

Electrical Code Course Update Requirements

by Thomas Kriegish

With a 1999 effective date of administrative rules adopting the 1999 National Electrical Code (NEC), licensees under the Electrical Administrative Act should be planning to complete code updates in both the 2000 and 2001 licensing periods.

All persons presently licensed by the State in the categories of journeyman electrician, master electrician, fire alarm specialty technician, and sign specialist are required by the Michigan Electrical Administrative Act to: *" . . . demonstrate the successful completion of a course, approved by the board, concerning any update or change in the code within 12 months after the update or change in that code. This requirement applies only during or after those years that the code is updated or changed."*

The adoption of the 1996 code was delayed in the administrative process and was not adopted until November 30, 1998. Due to the above requirement of the law, all licensees have to complete a code update course on that code edition to renew their license a year later. (All licenses expire on December 31st of each year.) Therefore, the present renewal process for receipt of a **2000 license** will require submission of a completion certificate on a **1996 code update course** with your renewal application.

In addition, with the adoption of the **1999 electrical code** prior to the license expiration date of December 31st, all licensees will be required to take a code update course on that code within the next year to renew **2001 licenses**.

This agency is presently beginning review of 1999 code courses and will publish a list after the end of this year's renewal process. Most of the course providers on the present list for 1996 courses will also offer the 1999 code courses. You may want to begin thinking of securing a course schedule from those on the list for next year.

Director's Column, continued...

restrictions include prohibitions on: unnecessarily increasing construction cost; restricting the use of new materials, products, or methods of construction; providing preferential treatment to types or classes of materials, products, or methods of construction; or obstructing the substantive uniformity of building codes within a region or locality in the state.

As ordinances are submitted, a review is conducted with these provisions as an overview. Where an amendment is not in conformity with these provisions, a notice is provided to the local community indicating the ordinance may not be approved.

With the advent of a single set of internationally developed codes, it is appropriate to review code modifications in this context. Codes should be reviewed for conformance with the standards proposed for use throughout the United States. Where regional differences have been noted, the model codes reflect these peculiarities or provide for the inclusion of such specific requirements, as noted above in the discussion on sewer depth. We no longer need to amend the codes except where the laws define certain

standards. These include provisions for accessibility, potty parity, premanufactured construction, and other such specific language.

Locally, codes need not be any more specific unless a specific condition exists that warrants such attention. If however, that condition exists in a single community, chances are it exists elsewhere in the state as well.

As noted, the number of amendments in the state codes have been reduced over the past several years and will continue to diminish where it is appropriate and within the context of the law. The same could be said for locally adopted codes.

Flexible Duct

by William Lycos

As of November 30, 1998, when the new State Mechanical Code went into effect, the installation of flexible duct and duct connection became less restrictive.

Flexible duct and flexible duct connectors are put into two classifications in accordance with U.L. 181. Testing is what determines whether the duct is classified flexible duct or a flexible connector. Both types of duct system are further classified as Class O or Class 1 flexible air duct. Class O air duct is one whose flame spread and smoke-development ratings are zero. A Class 1 air duct is determined when the flame spread rating is not greater than 25, with a smoke-development rating not greater than 50. Flexible air duct undergoes more extensive testing (the flame penetration test, puncture test, and impact test) than does the flexible duct connector.

The State Mechanical Code now allows the use of flexible duct and flexible connectors to be installed in areas that are not accessible. As indicated in Section 603.10 flexible duct and connectors shall not pass through walls, floors, ceilings and fire-resistance-rated assemblies. Flexible air ducts are unlimited in length. Flexible duct connectors are limited to a maximum length of 14 feet. Each section of flexible duct and flexible connector will identify the type of duct system with a label.

The installation of flexible duct or flexible connectors must comply with the manufacturer's instructions. The manufacturer's instructions state the installation of their duct system shall be as straight as possible, with the least amount of bends. The supports shall be a maximum distance of 5 feet and with a maximum sag of ½ inch between supports. The support material shall be a minimum of 1½ inches wide. The duct system may rest on ceiling joists or truss supports, but shall not be allowed to rest on top of suspended ceiling systems.

A flexible duct system shall avoid exposure to direct sunlight. When repairs are necessary to the exterior vapor barrier jacket, approved duct tape listed and labeled to standard U.L. 181B is required.

Questions regarding this issue may be directed to the Mechanical Division at (517) 241-9325.

Elevator 25 Foot Rule

by Rudy Perez

Rule 408.8639b of the Michigan Elevator Laws and Rules states:

"The entrance to the machine room shall be not more than 25 feet, walking, from a hoistway door."

This is the most commonly overlooked rule during the early stages of building design when installing elevators which fall under ASME A17.1, Section 300. This type of oversight can result in costly building modifications at the time of elevator completion. It is imperative that architects and elevator contractors communicate early in respect to elevator machine room locations.

Elevator contractors are required to submit a full set of drawings when applying for the installation of a new elevator. These drawings shall also include machine room location in respect to Rule 408.8639b of the Michigan Elevator Laws and Rules.

Questions regarding this rule may be directed to the Elevator Safety Division at (517) 241-9337.

The BULLETIN is a quarterly publication of the Bureau of Construction Codes within the Michigan Department of Consumer & Industry Services. The BULLETIN is published for the information of the 46,000 plumbers, electricians, mechanical contractors, boiler and elevator licensees, plan reviewers, building officials, and inspector registrants throughout the state.

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Boiler License Exams

by Bryan Jorgensen

The Boiler Division is often asked questions about what materials to study for the various licensing exams. Since the Boiler Division has a number of exams, the materials vary with each exam. The following is offered as a guide to the appropriate study materials:

Installer's License

Class 1B, low pressure < 1MBH Class 2B, low pressure unlimited MBH

The Michigan Boiler Law and Rules and Section 4 (Heating Boilers) of the ASME Code.

Class 3B-5B, high pressure boilers

The Michigan Boiler Law and Rules, Sections 1 (Power Boilers), 4 (Heating Boilers), 9 (Welding) of the ASME Code, as well as ASME B31.1 (Power Piping).

Repairer's License

Classes I - IV

The Michigan Boiler Law and Rules, Sections 1 (Power Boilers), 4 (Heating Boilers), 9 (Welding) of the ASME Code, as well as ASME B31.1 (Power Piping).

The Michigan Boiler Law and Rules are available for \$6.00. Make check or money order payable to the **State of Michigan**. Requests may be mailed to the following address:

Michigan Department of Consumer &
Industry Services
Bureau of Construction Codes
Boiler Division
P.O. Box 30255
Lansing, MI 48909

The ASME Codes may be purchased by calling 1-800-843-2763.

Any questions regarding licensing may be directed to the Boiler Division at (517) 241-9334.

Scheduled Board Meetings

MEETING	DATE	TIME	LOCATION
State Plumbing Board	Nov. 30, 1999	10:00 a.m.	Okemos-Conf. Room 2
Board of Boiler Rules	Dec. 14, 1999	9:30 a.m.	Okemos-Conf. Room 1
Electrical Administrative Board	Dec. 17, 1999	9:30 a.m.	Okemos-Conf. Room 1
Construction Code Commission	Jan. 12, 2000	9:30 a.m.	Okemos-Conf. Room 3
Barrier Free Design Board	Jan. 14, 2000	9:30 a.m.	Okemos-Conf. Room 1
Elevator Safety Board	Jan. 14, 2000	9:30 a.m.	Okemos-Conf. Room 3
Board of Mechanical Rules*	Jan. 19, 2000	9:00 a.m.	Okemos-Conf. Room 3
State Plumbing Board	Jan. 19, 2000	10:00 a.m.	Okemos-Conf. Room 1

Okemos = 2501 Woodlake Circle, 2nd floor, Okemos, MI

*Tentative Date

License Exam Schedule

EXAM	DATE	LOCATION	DEADLINE
Elevator Contractor & Certificate-of-Competency Exam	Jan. 14, 2000	Okemos	Dec. 27, 1999
Elevator Journeyman Exam	Jan. 19, 2000	Okemos	Dec. 29, 1999
Boiler Installer/Repairer Exam	Mar. 1/2, 2000	Okemos	Feb. 4, 2000
Boiler National Board Exam	Mar. 1/2, 2000	Okemos	Feb. 4, 2000
Mechanical Contractor Exam*	Mar. 15, 2000	Lansing	Feb. 16, 2000

Dates and locations are subject to change.

*Tentative Date

Please Note: All exam dates have not yet been finalized for 2000. Please contact the respective division in December to obtain exam dates and locations.

Boiler Code Rules Update

The process for the promulgation of the boiler code rules adopting the 1998 edition of the National Board Inspection Code (NBIC) and the 1998 edition of the ASME Boiler and Pressure Vessel Code and addenda is close to completion.

The bureau anticipates an effective date in January 2000. Rules will be mailed to installers, repairers, and inspectors prior to the effective date.

Questions relative to the boiler code may be directed to the Boiler Division at (517) 241-9334.

Bureau Medical Gas Piping Inspection Procedures

by Robert G. Konyndyk

The Bureau of Construction Codes, Plumbing Division has been inspecting medical gas piping installations in accordance with the 1997 International Plumbing Code (IPC).

Chapter 13 of the IPC mandates conformance to NFPA 99C. While the installation requirements are clear, the inspection procedures, specifics of Brazing Procedure Specifications, Qualifications, and Qualification test records require further enforcement interpretation. The Plumbing Division has developed contractor procedures for inspections and an inspection reporting form. Additionally, we have a 2 hour training overview for medical gas piping.

This division will only inspect those areas currently in our enforcement jurisdiction, which includes hospital and dental facilities. Contractors performing medical gas installations under state jurisdiction should contact Robert Konyndyk, Chief at (517) 241-9330 and request a permit application, explanation letter, and procedures.

2000 Inspector Training Programs

by Scott D. Fisher

Continuing education programs for inspectors will be conducted by bureau staff at the Ralph A. MacMullan Conference Center, Roscommon, Michigan, on the following dates:

Plumbing Inspectors	February 7-9, 2000 October 9-11, 2000
Electrical Inspectors	March 1-3, 2000 October 23-25, 2000
Mechanical Inspectors	March 20-22, 2000 September 11-13, 2000
Building Inspectors	December 4-8, 2000 (week #1) January 29-February 2, 2001 (week #2)

Reservations or questions regarding training programs should be directed to the Office of Local Government and Consumer Services at (517) 241-9347.

Bureau Training January 25-27, 2000

The bureau will be conducting annual training for management and inspection personnel January 25-27, 2000. Administrative support staff will be in the office and available to answer questions and take messages. Management staff will be in contact with the office on a daily basis. Any call which warrants immediate attention will be returned. If possible, please work with inspection staff to arrange inspections before or after the training seminar.

Use Group Classifications for Fire Stations

by Larry Lehman

Recently we have had several inquiries regarding the proper use group classification for fire stations. Table 304.2 of the 1996 BOCA National Building Code identifies fire stations as a business occupancy. Because many fire stations contain additional occupancies every portion of a building must be evaluated in accordance with chapter 3 for a mixed use group condition.

All portions of a fire station which are not consistent with use group B must be classified according to their specific occupancy. Examples of mixed uses present in fire stations include: garages, use group S-1; sleeping quarters, use group R-2; and meeting rooms occupied by 50 or more individuals, use group A-3.

Inspection Requests

Thank you for your patience during times when the bureau was experiencing delays in issuing permits. With newly appointed staff and computer enhancements we are currently issuing permits within two (2) days of receipt of the application. Therefore, the bureau is now reverting back to its policy of "no inspections without an issued permit". Please make sure all permit applications are filed on a timely basis and have the permit number ready when calling for an inspection.

Holiday Closings

State offices will be closed in observance of the following holidays:

November 25 & 26 -- Thanksgiving
December 23 & 24 -- Christmas
December 30 & 31 -- New Years
January 17 -- Martin Luther King, Jr. Day
February 21 -- President's Day

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